

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015129**Date Inspected:** 26-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang and Wu Zhi Cheng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 10CW (Cope Holes)

This QA Inspector performed Dimension Control Inspection for the Floor Beam to Bottom Panel Cope Holes, Floor Beam to Side Panel Cope Holes, Longitudinal Diaphragm Cope Holes East and West side of each Panel Point at Work Point (W4) from West Side at Panel Point (PP) 92, PP 93 and PP 94 for Segment 10CW the Inspection was performed against the ABF Inspection Report No. CWAHIR-10CW-01 Dated May 20, 2010. The measured readings were recorded in the Dimension Control Form (DCP) and submitted to the Lead and Engineer for review.

Segment 8CE

This QA Inspector observed Repair welding by Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as Seg048B-046. The welder number is identified as 053753 and was observed welding in the 1G (Flat) position using approved Welding Procedure Specification

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## WELDING INSPECTION REPORT

( Continued Page 2 of 4 )

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WPS-345-SMAW-1G (1F)-FCM-Repair-1. The welding was performed against the Critical Welding Repair Report B-CWR1618.

Segment 9AE to 9BE

This QA Inspector observed Repair welding by Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE9B-004. The welder number is identified as 053753 and was observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-345-SMAW-3G (3F)-FCM-Repair-1. The welding was performed against the Critical Welding Repair Report B-CWR1592. PMCK identified as Side Panel Bike Path Side.

Segment 9BE to 9CE

This QA Inspector observed welding by Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE9B-009. The welder number is identified as 067752 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1. PMCK identified as Side Panel Cross Beam side.

Segment 9BE to 9CE

This QA Inspector observed welding by Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE9B-010. The welder number is identified as 062092 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1. PMCK identified as Side Panel Corner Assembly Cross Beam side.

Segment 9BE to 9CE

This QA Inspector observed welding by Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SP689-001-056~60. The welder number is identified as 220067 and was observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-B-T-2233-B-U2-F. PMCK identified as I-Ribs at Bike Path side.

Segment 9BE to 9CE

This QA Inspector observed welding by Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SP707-001-031~035. The welder number is identified as 220063 and was observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-B-T-2233-B-U2-F. PMCK identified as I-Ribs at Bike Path side.

Segment 9AW

This QA Inspector observed Bottom Plate installation is in progress at the FL3 location for Segment 9AW between Panel Point (PP) 74, PP 75 and PP 76. Please refer the pictures attached below for more comprehensive details.

# WELDING INSPECTION REPORT

( Continued Page 3 of 4 )

## Segment 8BE to 8CE

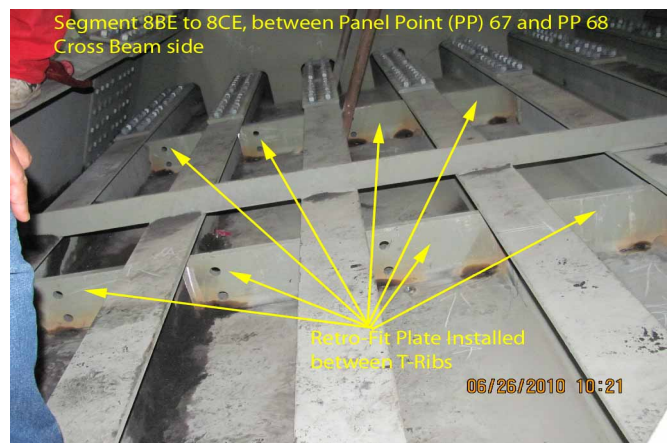
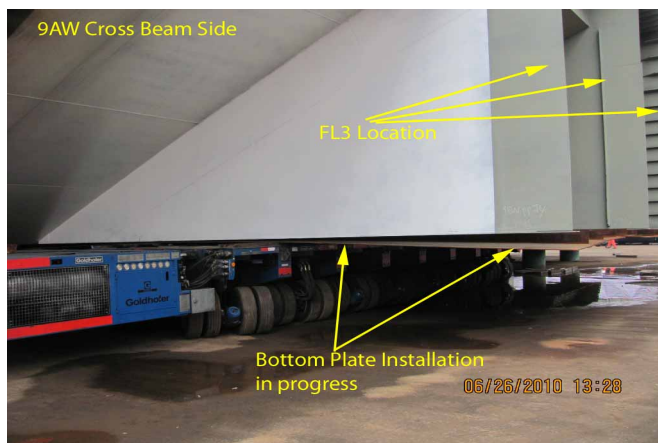
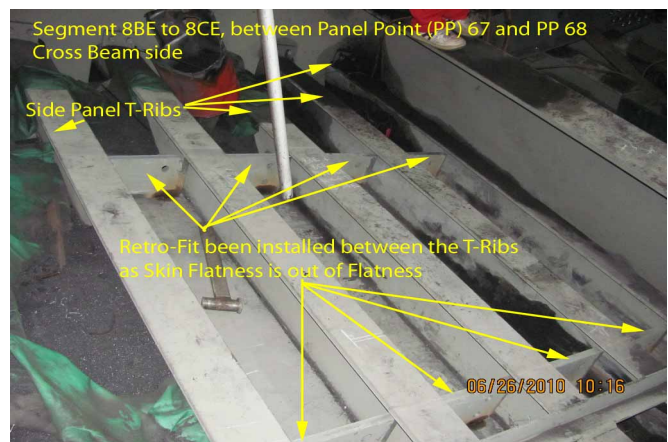
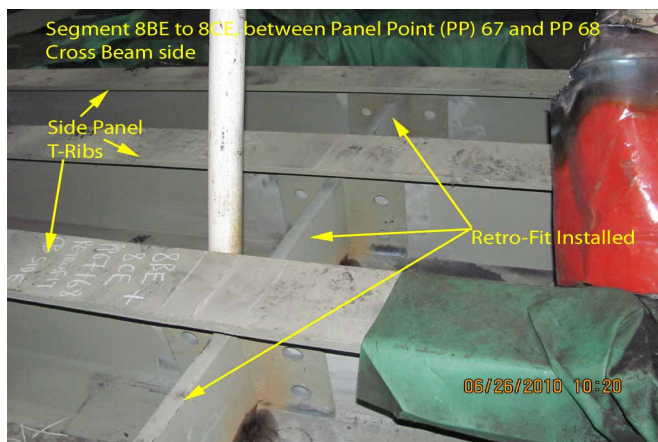
This QA Inspector observed during random visual Inspection that ZPMC personnel Installing the Retro-fit plates between the Side Panel T-Ribs for the Segment 8BE to 8CE between Panel Point 67 and PP 68 Cross Beam Side. The Installation of the Retro-fit is been performed against the ZPMC Doc. No. GGL-MQ-1666. The Retro-fit is Installed as the Skin Flatness at location recorded at B1=1 0mm, B1-1=6mm and B2=6mm.

Please refer the pictures attached for more comprehensive details.

## Segment 8AE to 8BE

This QA Inspector observed during random visual Inspection that ZPMC personnel Installing the Retro-fit plates between the Side Panel T-Ribs for the Segment 8AE to 8BE between Panel Point 64 and PP 65 Cross Beam Side. The Installation of the Retro-fit is been performed against the ZPMC Doc. No. GGL-MQ-1666. The Retro-fit is Installed as the Skin Flatness at location recorded at B1=6mm and B2=9mm.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

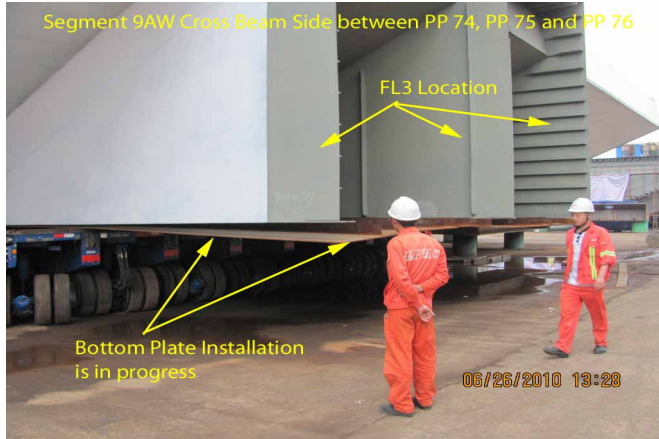


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# WELDING INSPECTION REPORT

( Continued Page 4 of 4 )

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## Summary of Conversations:

No relevant conversations.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Math,Manjunath

Quality Assurance Inspector

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**Reviewed By:** Carreon,Albert

QA Reviewer